This is a preprint version of an article:

Oksanen, Atte; Nurmi, Johanna; Vuori, Miika & Räsänen, Pekka (2013) Jokela: The Social Roots of a School Shooting Tragedy in Finland. In Nils Böckler, Thorsten Seeger, Peter Sitzer & Wilhelm Heitmeyer (eds) *School Shootings: International Research, Case Studies and Concepts for Prevention* (pp. 189–215). New York: Springer.

http://rd.springer.com/chapter/10.1007/978-1-4614-5526-4_9

Jokela: The Social Roots of a School Shooting Tragedy in Finland

Atte Oksanen, Finnish Youth Research Network and University of Turku, Finland
Johanna Nurmi, University of Turku, Finland
Miika Vuori, University of Turku, Finland
Pekka Räsänen, University of Turku, Finland

Abstract

An analysis of a school shooting that took place in the small town of Jokela, Finland, in 2007. The perpetrator, Pekka-Eric Auvinen, pursued a clear and sophisticated media strategy and wrote a manifesto that underlined nihilism, hate, and disillusion with society and his peers. Auvinen was a shy, lonely young man who found his peer group in internet communities that glorify school shootings. The data used data included investigation reports, a two-wave survey conducted in Jokela six and eighteen monthe after the shooting, and interviews with local residents and involved professionals. Our analysis reveals the social roots of the tragedy. Auvinen was bullied and felt ostracized in the small community. Both school and family failed to integrate him socially. In the local community, young people became increasingly worried about his talk and behavior, especially in the year immediately preceding the shooting. Auvinen's parents tried without success to get psychiatric help for their son, who became increasingly radical in his thoughts and obsessed with terrorist violence. A lack of meaningful social ties magnified the effect of online communities that indirectly encouraged Auvinen to carry out his "Main Strike." The shooting was a traumatic event for the whole community since the perpetrator had lived there most of his life. Social support and solidarity enhanced the prospects for coping.

Keywords: school violence, ostracism, online identity, local community, coping

School shootings are statistically rare events, but their impact on perceived safety can be dramatic (Borum, Cornell, Modzeleski, & Jimerson, 2010). The Columbine school shooting in 1999, for example, became a metaphor of emotions surrounding youth, fear, and risk (Muschert & Peguero, 2010). In Finland, a small Nordic country with 5.3 million people, school shootings were not considered a risk before 2007. The Jokela high school shooting on November 9, 2007, and the Kauhajoki school shooting on September 23, 2008, changed the safety scenario of Finnish educational institutions. Before the Jokela case, Finnish schools had gained an international reputation for their outstanding results in the OECD's PISA studies (Programme for International Student Assessment) in the 2000s (Sahlberg, 2010). Since the school shootings, there have been changes in school safety instructions and various plans have created to prepare for potential future cases.

The Jokela and Kauhajoki shootings are the most lethal mass murder cases in the criminal history of Finland. Eighteen-year-old Pekka-Eric Auvinen and 22-year-old Matti Saari each entered his own educational institution and started a violent rampage using similar .22 calibre semi-automatic pistols bought at the same gun store in Jokela. Both not only shot fellow students dead, but also tried to burn down the school. Auvinen murdered five male students aged 16 to 18, one 25-year-old

female student, the female principal, and the school nurse at the Jokela upper secondary school before committing suicide. Saari, a student of hospitality management, murdered a teacher and nine fellow students in a classroom before turning the gun on himself at the Kauhajoki unit of Seinäjoki University of Applied Sciences. Saari followed the same pattern as Auvinen only 10 months before. Both created a media strategy and uploaded videos, pictures, and other material on the internet before committing the shooting. The guns used were similar and both burned parts of their schools.

Studies investigating school shootings often concentrate on the psychological state of the perpetrator. Despite the benefits of such understanding, the school shootings have a much broader social psychological and sociological impact that is important to take into account. First of all, shootings occur in specific social contexts that often involve social psychological factors, such as social exclusion of the shooter and failure in preventive strategies (Bondü & Scheithauer, 2011a; Newman, Fox, Harding, Mehta, & Roth, 2004; Verlinden, Hersen, & Thomas, 2000; Vossekuil, Reddy, & Fein, 2000). Secondly, school shootings involve cultural aspects that have become increasingly important as information about previous shootings is disseminated online by school shooting fan groups (Böckler & Seeger, 2010; Kiilakoski & Oksanen, 2011a). Thirdly, school shootings impact local communities that have to face the consequences of the tragedy (Hawdon & Ryan 2011; Hawdon, Ryan, & Agnich, 2010; Nurmi 2012; Nurmi, Räsänen, & Oksanen, 2012; Ryan & Hawdon 2008). Fourthly, school shootings may have nationwide impacts, such as change in firearms policies and safety instructions (Addington 2009; Birkland & Lawrence 2009; Lawrence & Birkland 2004; Lindström, Räsänen, Oksanen, & Nurmi, 2011). In a small country such as Finland, school shootings have had an impact on social and welfare policies (Oksanen, Räsänen, Nurmi, & Lindström, 2010; Oksanen, Räsänen, & Nurmi, 2012).

This chapter focuses on the Jokela case that initiated a new era of safety risks related to schools in Finland. The Jokela school shooting tragedy has also become an important reference point internationally since the shooter formulated a media strategy and supplied a great deal of of online material for those who glorify school shootings. Our case analysis will use various empirical data sources including the pre-trial investigation report by the Finnish police, material uploaded to the internet by the shooter, and quantitative and qualitative local community data collected in Jokela after the shooting. We examine what happened both *before* and *after* the tragedy: 1) What were the main causes leading to the attack? And 2) what were social consequences of school shooting in the local community of Jokela? The analysis will expand our knowledge on social psychology and sociology of school shooting phenomena.

1. Severe violence in Finnish schools and public places before the Jokela shooting

School shootings are often portrayed as unexpected catastrophes. In Finland the Jokela case was interpreted as an isolated incident, which had international, mainly American roots (Oksanen et al., 2010). Yet, the Jokela school shooting was not the first homicide in a Finnish school. It is therefore important to understand that extreme cases such as the Jokela or Kauhajoki school shootings represent only the most visible form of school violence in Finland. School shootings should be understood in their broader cultural and social context (Kiilakoski & Oksanen, 2011b).

In the 1980s there were three fatal incidents in Finnish schools. In 1981, an 18-year-old student killed his teacher with a spade. Three years later, in 1984, a 14-year-old student killed his teacher with a knife. Knives were also used as weapons in fights between students in Finnish schools in the 1990s and 2000s, though none of these incidents were fatal. Most of the information about severe school violence was collected only after the Jokela school shooting. Detailed and exact information about severe but non-fatal cases is scarce, which means that there may be many more serious cases in Finland that have remained outside the public eye. Sometimes schools have downplayed violent incidents to avoid damage to their reputations.

The most severe case before Jokela occurred in the town of Raumanmeri in 1989. A 14-year-old student had a grudge against three of his fellow students. He borrowed Parabellum and Mauser pistols from his father and shot two people dead in his school classroom before a student intervened to stop him. He fled the scene and was later arrested by the police. According to the police pre-trial

report (National Bureau of Investigation, 1989), the shooter claimed revenge as a motive, because he thought he was a victim of bullying. Based on the police interview records included in the report, it seems that he had been involved in a rather longlasting conflict with one of the boys and verbal and possibly physical conflicts with two others. According to some witnesses the perpetrator was not the underdog in these fights. Only one student told the police that the shooter had been bullied. Some students and adults knew, however, that there had been some kind of feud between the boys. The teachers were unaware of any problems.

The Raumanmeri case illustrates how a shooter may justify their actions in terms of a sensation of having been bullied. Although the shooter gave bullying as a motive, its severity remains unclear. Other factors might explain why the shooter sought a violent solution to his conflict with the other boys. One teacher and some fellow students portrayed the shooter as withdrawn and introverted. His fascination with guns and hand grenades was mentioned in several witness statements. The act was carefully planned. The perpetrator said that he had been contemplating the idea for a year. In the police interview, he said: "I understand the deed. I tried to eliminate two nasty persons. I failed to eliminate the third nasty person [name deleted]" (Rauma Police Department, 1989, p. 26). The shooter committed the act only one month before turning 15. Since the age of criminal responsibility is 15 in Finland, he did not face any criminal punishment. The case was soon forgotten for almost two decades.

There are some indications that guns returned to schools in Finland in the early 2000s. Although gun ownership is common in Finland (per capita the third highest in the world), it is unusual to carry a gun. In January 2002, a 14-year-old girl shot a boy in the head with an air pistol at school in the town of Riihimäki, southern Finland. In the same month, a 14-year-old boy brought a handgun to school in the town of Raahe, northern Finland. In May 2002, a loaded handgun was found on a 16-year-old student in the town of Jyväskylä, central Finland. In October 2003, a 16-year-old boy barricaded himself on the school roof with a 0.22-caliber pistol in the town of Hamina, southern Finland. All these events were reported in the Finnish media, including in the biggest daily *Helsingin Sanomat* (Pihlaja, 2003; Saavalainen, 2003).

This phenomenon of bringing guns to school might indicate rising influence of the widely publicized Columbine school shooting. Earlier research on school shootings has underlined the importance of the Columbine shooting in making school shootings an international phenomenon (Larkin 2009; Oksanen & Kiilakoski, 2011a). In Sweden, a close neighbor of Finland, there was a school killing with a knife in the town of Sundsvall in 2001 (Böckler & Seeger, 2010, p. 228). Earlier the same year a 16-year-old student was shot dead over a drug debt in school in Stockholm (Helsingin Sanomat, 2001). School shootings in Germany have also been followed closely by the Finnish media. Germany has witnessed several fatal cases over the years as well as several serious attempts (Bondü & Scheithauer, 2011a; Hoffmann, Roshdi, & Robertz, 2009).

The most serious case of violence before the Jokela school shooting occurred in the Helsinki metropolitan area in October 2002, when a 19-year-old man detonated a home-made bomb at the Myyrmanni shopping centre. Seven people died, including the bomb-builder, and almost 200 were injured in the explosion. The Myyrmanni case is important, because—as we will see—the Jokela shooter saw it as an example. The Myyrmanni bomb attack and the Jokela and Kauhajoki school killings have several features in common. They all resemble terrorist attacks and were carried out at locations that were central to the perpetrators' lives. They could all have been motivated by international examples, such as Timothy McVeigh, the Unabomber, and Columbine. In Finland they represented something totally new and unusual, since Finland has not traditionally been accustomed to dealing with terrorist violence (Oksanen et al., 2010).

2. Well-being of young people in Finland

Systematic studies investigating the conditions for school shootings show that in at least some respects psychological disorders, such as symptoms of depression, narcissistic personality traits, and lack of empathy, play a role in school shootings (Bannenberg, 2010; Bondü & Scheithauer, 2011a, 2011b; Böckler, Seeger, Heitmeyer, 2011; Newman et al., 2004; Robertz & Wickenhäuser,

2010). Shooters often faced problems in their peer group and felt excluded or rejected (Böckler et al., 2011: Newman et al., 2004; Verlinden et al., 2000; Vossekuil et al., 2000). The combination of psychological and social problems, especially, is crucial to understanding aggressive behavior. Studies on aggression and violence indicate that a combination of social rejection and narcissism predicts violent behavior (Twenge & Campbell, 2003). Cultural aspects are especially important for the prevention of such behavior. To what extent, for example, are bullying, ostracism, loneliness, or psychological problems ignored or taken seriously?

The Myyrmanni case is an example of culture-specific problems. In a book about his son, the perpetrator's father, Petri Gerdt, wrote how he regretted that he never asked how his son was doing in school. It was enough that he had good grades. He relates how his son had no friends coming to visit after the age of twelve. The father did not want blame anyone, but said it was astonishing that the school did not consider his son's ostracism as a problem at any point (Gerdt, 2004). In the Myyrmanni case both the school and the family failed to socially integrate the perpetrator. The Myyrmanni case is an extreme example, but there are other indications that schools in Finland might be failing to promote psychological and social well-being of the children. Satisfaction with school, for example, is lower than international averages in all age groups in Finland (Currie et al., 2008).

Some studies indicate that there might be problems related to social cohesion and close social relationships in Finland. Traditionally, Finnish culture has favored individualism at the expense of social cooperation. The flip side of individualism shows in the lack of social cohesion and social interaction. In a survey of 21 countries, relationships between Finns were found to be the weakest (Kääriäinen & Lehtonen, 2006). In a study of the well-being of children in 21 OECD countries, Finland ranks well in material well-being (3d), health and safety (3d), education (4th), but much lower in subjective well-being (11th) and especially in family and peer relationships (17th) (UNICEF, 2007). A comparison of 41 countries found that Finns aged 11–15 had fewer close friends than average (Currie et al., 2008, pp. 29–31).

In international comparison, Finnish children report less bullying than average (Currie et al., 2008; UNICEF, 2007). In spite of this, national studies suggest that there may be problems in the social atmosphere of Finnish schools (Kiilakoski & Oksanen, 2011b). A report based on the National School Health Survey found that loneliness, bullying, and psychosocial problems are common among children (Välimaa et al., 2008). Half of surveyed 15- to 16-year-olds (49 %) reported that they had sometimes bullied other children (National School Health Survey, 2009). Thirty-nine percent of 15-year-old boys and 29% of girls reported that they had been assaulted or threatened with assault within the last year according to the 2008 National Child Victim Survey. Young people face more violence than adults. The most significant arenas of violence are school and home (Kääriäinen 2008).

Longitudinal studies conducted in Finland show that young people are at risk of bullying and exposure to violence. According to the Finnish 10-year "From a Boy to a Man" follow-up study, those who were victims of bullying at the age of eight were more likely to suffer anxiety disorders 10 to 15 years later (Sourander, 2007). Another study of 16,000 young people aged 14–16, based on the National School Health Survey, reports that bullies and the victims of bullying showed more symptoms of depression and suicidal thoughts than other children (Kaltiala-Heino et al., 1999). Weak social cohesion and lack of social interaction may contribute to these problems, while strong social ties enable successful coping with such experiences. For young people especially, meaningful relationships with peers (in and out of school) are powerful resources of well-being.

A relatively small proportion of young Finns suffer from severe psychological problems. Depression is relatively common among Finnish young people: according to the National School Health Survey, approximately 10% of Finnish young people suffer from moderate or severe depression. There has, however, been no increase in depression in the last ten years (THL, 2010), nor any increase in suicides by young people. Suicides by males aged 15–24 have decreased over the past 20 years (Lahti et al., 2011). However, Finnish young people still have remarkably high youth suicide rates in international comparison. The Finnish 15-24-year-old male suicide rate is 33.1/100,000 (the fifth highest in the world), the female rate 9.7/100,000 (the second highest in the

world) (Uusitalo, 2007). Finnish young people are twice as likely to commit suicide as young people in the United States and three times as likely as young people in Germany (WHO, 2006).

We conclude that a small proportion of Finnish young people suffers from severe psychological problems. Compared to many other affluent Western countries, youth in Finland experience considerable problems and risks related to well-being. Studies consistently show that Finnish people have weaker intimate bonds and experience problems related to social interaction both at school and at home. One of the problems lies in the individualism that is highly valued in Finland. In the worst case, ostracism and bullying may lead to the formation of violent forms of individualism. Depression and suicide among young people are equally important factors, since school shooters often commit suicide at the end of their attack (Newman et al., 2004). We now turn to a detailed description of the Jokela shooting tragedy and its aftermath in Finland.

3. Jokela data

The data used in this article was collected in a research project entitled "Everyday Life and Insecurity: Social Relationships After the Jokela and Kauhajoki School Shootings in Finland" led by Atte Oksanen and Pekka Räsänen (2008–2012). This sociological project investigates local and national reactions to school shootings in Finland and includes a social psychological sub-theme seeking to identify the key factors that caused the school shootings. The researchers collected systematic data from local communities in Jokela and Kauhajoki and other relevant data. The following data are utilized in this contribution.

Jokela case data:

a) Internet data including the media package produced by Pekka Eric-Auvinen (videos, IRC-Galleria social networking profile and manifesto) and other material accessed directly after the Jokela shooting in November 2007.
b) The 572-page pre-trial investigation report by the Finnish police (National Bureau of Investigation [NBI], 2008) containing descriptions of the events, previous behavior by the offender that can be linked to the shooting, and transcribed interviews with eyewitnesses and other people involved, including the mother of the perpetrator. The report includes additional details on technical investigation (38 pages) and 46 videos made by Auvinen that were found on his computer. Some of them were part of his media package and YouTube profile (Kiilakoski & Oksanen, 2011a).
c) The report by the Investigation Commission of the Jokela School Shooting (ICJ, 2009) gives general information about the case and the perpetrator.
d) Interview with the parents of Pekka-Eric Auvinen broadcast in 2008 by MTV3 on Finnish television. After the Kauhajoki school shooting, the parents of Pekka-Eric Auvinen contacted MTV3 and proposed an interview. This 17-minute interview contains some information not included in the pre-trial investigation and research committee reports.

Jokela local community data:

a) Mail surveys of the Finnish-speaking adult population conducted in Jokela six and eighteen months after the incident (May–June 2008 and May–June 2009). The surveys used simple random sampling and yielded response rates of 47% (2008, n=330) and 40% (2009, n=278). Although response rates remained below 50%, the samples represent the research population relatively well (see Oksanen et al., 2010; Hawdon, Räsänen, Oksanen, & Ryan, 2012). The survey questions focused on local residents' well-being, social resources, subjective perceptions of the shooting, and experiences of social solidarity in the neighborhood.
b) Focused interviews conducted in January–March 2009 with six interviewees who had participated in the crisis work or aftercare (expert interviews 1–6). The main focus was on interviewees' experiences of local residents' reactions to the shooting and their grieving strategies. The interviews were from 60 minutes to almost 120 minutes long
c) Seventeen interviews involving 19 interviewees were conducted in October 2009, 23 months after the shooting (local people interviews 1–17). Interview themes related to coping with the tragedy, social relations in the local communities, descriptions of the local communities, the participant's personal experience of the school shooting, and the consequences of the shooting

for personal and community life. The duration of the interviews varied from 20 minutes to over three hours, although most lasted between 60 and 90 minutes.

d) The parents of Pekka-Eric Auvinen were interviewed twice, in January 2010 and in June 2011 (parents' interviews 1–2). The father of Pekka-Eric Auvinen contacted Atte Oksanen in January 2010 and offered to participate in the research. The interview themes were the same as in the other interviews with local people. The parents were aware that their interview was so different from other interviews that it could not be treated in the same anonymous way in the analysis. The first interview lasted over three hours and the second two hours and 45 minutes.

Our qualitative analysis of the Jokela case data and interviews begins by describing what happened before the shooting, including information about the shooter and his social relationships in the small community: 1) how he is described as a person; 2) what kind of social relationships he had within the community; 3) key life events prior to the shooting; 4) identity development prior to the shooting; and 5) prior events or incidents that motivated him to plan the shooting.

Our second theme is how local people reacted to the shooting. Since the shooter was a local resident and many of his problems were known, this theme is closely connected to the first. Qualitative analysis of the in-depth qualitative interview data from local residents is used to elicit detailed descriptions of the social and psychological difficulties that the school shooting caused to local witnesses. Quantitative analysis based on descriptive analysis and explanatory analysis using structural equation modeling (SEM) supplies a general overview of how local residents coped with the shooting. We seek to identify how well social support and other related factors can predict fear of violence among Jokela residents. Technically, analysis focuses on the relationships between social support, social solidarity, institutional trust, generalized trust, and fear of school shootings and terrorist attacks.

4. Difficulties of growing up in a small community

Studies on school shootings note that such acts often occur in rural communities and suburbs rather than in big cities, which are culturally and socially complex and do not impose a single norm for behavior (Fast, 2008, p. 17; Harding, Fox, & Mehta, 2002, p. 175; Newman et al., 2004, pp. 52, 112). One reason may be that social pressures accumulate more in small communities where a school bully is likely to live in close proximity. Jokela is such a small community. Although it belongs to the larger municipal district of Tuusula and is close to the Helsinki metropolitan area, it was portrayed by experts and local people as a small village-like community. It was considered a good and peaceful place to raise children. Despite its image as a quiet suburban neighborhood, it was widely known before the shooting that there were problems with young people in Jokela, such as persistent school bullying and drug use.

The Auvinen family moved to Jokela from Helsinki before Pekka-Eric started school at the age of seven. His mother said in the first interview that they wanted to provide a stable environment for their son. She described social relationships in Jokela after the move as casual. Later in the interview, however, she stated that she had always felt an outsider in Jokela and that people did not cooperate much. Overall, the interview gave an impression that Jokela was a provincial place and not necessarily receptive to new ideas or people standing out from the others. Most her close friendships were in the Helsinki area or northern Finland. She had no close relationships in Jokela and most of her social activities were related to work or children. She also stated that there were ideological differences with other local people, despite their social, educational, and financial similarities. Before the shooting, however, social relationships with other people in the community were formally in order. (Parents' interview 1)

The parents criticized Jokela for offering boys only competitive and tough team sports (soccer and ice hockey) as hobbies. Since the family did not have a car, finding alternatives in neighboring areas and towns was difficult. The mother stated that this led Pekka-Eric to grow up as a "soft boy" (Parents' interview 1). This contrasts with male role models in Finnish society in general, especially a small place such as Jokela. According to the parents, this caused Pekka-Eric to lack lack "the

physical and verbal toughness that seems to be demanded nowadays" (Parents' interview 1). Previous research suggests that school shooters often faced harassment for inadequate gender performance (Kimmel & Mahler, 2003; see also Newman et al., 2004; Twenge & Campbell, 2003).

Systematic comparison of school shooting cases shows that the offenders were not socially successful (Newman et al., 2004, p. 235). The Jokela case confirms these findings. Auvinen's problems with his peers began at the age of 10 when he was in the 4th grade in comprehensive school. He was bullied verbally and physically (NBI, 2008, p. 554), and the problem worsened over the following years. When he was 11, he reported in the School Health Survey that bullying troubled him (ICJ, 2009, p. 49). His father stated in the television interview that Auvinen was shot with a airsoft gun on his way to school and sometimes laser pointers were directed at his eyes (MTV3, 2008). The bullying continued at the upper level of comprehensive school (7th–9th grade) and was noted by the school nurse and doctor (ICJ, 2009, pp. 49–50).

The parents contacted the school several times when their son was 10 to 12 years old because they thought that the school was too lax regarding bad manners, swearing, and bullying. The school considered that Auvinen did not behave and dress like a typical boy. He wore a formal shirt and trousers, which were untypical for young people of his age. (ICJ, 2009, p. 49; NBI, 2008, p. 554). According to his mother, this was because the family was critical towards the media and her son did not want to use clothing marketed to young people in commercials (NBI, 2008, p. 554). The school, however, expected Auvinen to fit in with the norms of the small community. In the interview, the mother stated that the school failed to organize any kind of meeting to address the problems between Pekka-Eric and the other boys (Parents' Interview 1). The Investigation Commission report confirms the unresponsiveness of the school and notes that the parents "made contact with the parents of other students, telling them their children behaved badly. The other parents found this annoying, and some told their children to avoid his [Auvinen's] company" (ICJ, 2009, pp. 49–50).

The most direct consequence of the bullying was loneliness. Auvinen's parents stated that their son suffered from loneliness. He did not fit in with boys who were tougher and more physical. Bullying cut off his friendships (Parents' Interview 1). A friend from the early period said that Auvinen's parents perhaps over-reacted, contacting the parents of his peers over seemingly small incidents, which caused him the loss of friends. (NBI, 2008, pp. 431–432) A similar statement is found in an interview with a local adult. The parents' (understandable) concern about boys' physical games might have unintentionally exacerbated their son's social exclusion.

According to his mother, Auvinen lost his last remaining friend when he started to take an interest in politics. His friend belonged to a local congeregation of Jehovah's Witnesses, who did not accept involvement in politics (Parents' interview 1). She stated that the last years in comprehensive school (aged 13–15) were tough because her son had no friends:

> He kept asking during summer holidays and weekends: "Mother why don't I have any friends?" We were thinking really hard where to find friends for him. (…) We tried to suggest all kinds of things, but Pekka was not interested in the things kids in his age usually are. In that sense he was special. (MTV3, 2008)

Auvinen would perhaps have fitted in better in some other type of school environment. He was psychologically vulnerable and unable to socialize with other boys. His interests and reactions were already unusual in his primary school years. His mother described how he was affected by strong media images after the attack on the World Trade Center:

> When the Twin Towers burned, he was 12 and it was a shock to him, because he profoundly admired the USA and New York. At this time, he was still playing with Lego bricks and it became part of his play. For several weeks, he built the twin towers again and again. (Parents' interview 1)

The terrorist attacks seemingly shocked the 12-year-old Auvinen, who was perhaps unable to cope psychologically. Psychological vulnerability plays a role in identity development, and is regarded as

important in the research literature on school shootings, especially when combined with other factors such as school bullying, ostracism, and violent fantasies (Bondü & Scheithauer, 2011a, 2011b).

Auvinen started to take a serious interest in politics at the age of 12. A fellow student said that he had already held strong opinions in primary school, at the time admiring America and capitalism (NBI, 2008, p. 220). Until the shooting his mother was an active member of the local Green Party, stating in the interview that she represented "the dark green" side of the party and was on the margins even inside her own party (Parents' Interview 1). She stated that Pekka-Eric Auvinen was really stubborn in his political ideas and made his own decisions (MTV3, 2008). During his last years in comprehensive school Auvinen moved gradually from the political mainstream to more marginal parties such as the Communist Party. In upper secondary school (age 16–18) he became absorbed in totalitarian regimes, including North Korea and the German Third Reich. This was worrying for the family and his mother tried to discuss these issues with him (NBI, 2008, pp. 554, 557).

The mother complained in one interview that the Finnish school system concentrated too much on mathematical skills and provided insufficient grounding in social and philosophical questions. She said that her son stood out from the other students as a person who held excessively strong opinions, but had no-one to oppose him intellectually (Parents' Interview 1). According to the police pre-trial report, Auvinen had discussions with teachers on political radicalism and made presentations, for example about North Korea. According to one teacher, all of his teachers knew about his radical ideological preferences (NBI, 2008, 130). However, not all of them wanted to engage in in argument with him (ibid., 136) Statements by teachers and students confirm that politically radical views did not help Auvinen to socialize with other young people who did not sympathize with radical left- or right-wing thinking. It is possible that Auvinen was interested in totalitarian regimes as a way to reflect on control and manipulation.

Loneliness and bullying may have contributed to Auvinen's mental health problems (Kiilakoski & Oksanen 2011b). He also suffered from blushing and insecurity. In 2006, at the age of 16, a school doctor prescribed him an SSRI for panic disorder and social phobia, despite the fact the SSRIs are not recommended for minors in Finland. Less than one year later his parents tried to get him psychiatric help (ICJ, 2009, pp. 50–51; NBI, 2008, p. 555). According to his mother, the doctor said that they should just increase the dosage (MTV3, 2008). The parents were also told that Auvinen's symptoms would need to be much more serious for a referral to the Adolescent Psychiatry Outpatient Clinic. In 2007, Auvinen was granted a three-year deferment of compulsory military service because of issues related to his mental health. He did not report any symptoms of depression or suicidal tendencies (ICJ, 2009, pp. 50–51).

5. Constructing a violent identity

School shootings are not impulsive and spontaneous acts, but involve long developmental processes during which the shooters move from violent fantasies to the detailed planning of attacks (Bondü & Scheithauer, 2011b). Shooters generally suffered psychological and social problems and perceived themselves as isolated or marginal (Newman et al., 2004). Sometimes this is due to bullying, but sometimes they voluntarily isolate themselves from others. Before the attacks they often suffered major losses (Vossekuil et al., 2000). During the final pre-attack phase shooters used materials about previous school shootings, including films and music (Kiilakoski & Oksanen, 2011a). Shooters reveal some aspects of their plans to others, usually their friends. Adults are less likely to recognize the severity of the situation (Bondü & Scheithauer, 2011b; Newman et al., 2004).

The Jokela case is comparable to other school shootings and shares many of their characteristics. Auvinen's behavior changed during the last year of his life. He was 17 years old and the family had already tried to get him psychiatric help. His mother said that he became more radical ideologically and showed increasing interest in terrorist attacks and school shootings. She said that she was worried about her son and hoped that situation would not end up like the Myyrmanni bombing. She was, however, relieved that he at least talked to her and hoped that nothing bad would happen (NBI, 2008, pp. 554–555). In the last months there was a loss in the family when Auvinen's maternal grandmother died. She had been close to Auvinen and had lived within the family in the early part of his childhood (Parents' interview 1).

According to teachers and fellow students interviewed by the Finnish police (NBI, 2008), Auvinen was not totally isolated during his upper secondary school years. It is unlikely that he was bullied at this point, but he did have radical political ideas that may have irritated other students. Auvinen also had a small group of friends who gradually became worried about him. They tried to oppose his enthusiasm for school shootings and similar acts (ibid., pp. 433, 487, 491). One said that they were "trying to keep his feet on the ground and reminded him that innocent bystanders were killed in the incidents" (ibid., 433, translated). They also said that he became more reluctant to participate in activities they suggested (ibid., 432). It seems that during this period Auvinen's psychological problems worsened and he started to seriously plan a shooting.

The first diary entries on the "Main Strike" are from March 4, 2007, eight months before the shooting. On March 7, he writes: "I'll kill as many bastards I can. (…) The one man war against everyone and everything can start sometime next fall on a doomsday dawn" (NBI, 2008, p. 9, translated). Auvinen gained inspiration from the Virginia Tech shooting of April 16, 2007. He wrote that day:

> Hahhahhaa! A historic day, Cho Seung-Hui has just killed 33 people in a university in Virginia. The new record in so-called educational institution shootings. There's not much more to write at this point, I think I'm going to do a massacre in Hitman [videogame]. (NBI, 2008, 9, translated)

Only four days later, on April 20, 2007, he made his first comment in the "Eric Harris & Dylan Klebold" group in the IRC-Galleria social network (ibid., p. 15). It was the anniversary of the Columbine shooting.

The Columbine and Virginia Tech shootings motivated Auvinen. While his school friends disapproved of his enthusiasm for school shootings, he found an online audience that was more willing to understand his radical views (Kiilakoski & Oksanen, 2011b). He participated in Finnish and international networks and made videos that he uploaded, especially to YouTube. The Finnish police were able to interview his Finnish connections. Many of them seemed to be fascinated by school shootings and similar acts (such as the Myyrmanni bombing) and discussed the possibility of a Finnish school shooting. They made positive comments on Auvinen's thoughts and videos on IRC-Galleria and YouTube (NBI 2008).

Auvinen became the first real online-era shooter. None before him had been so active and so consistent in constructing a Web profile. During the last year, his interest started to be based on finding an online identity to enable the school shooting. His preferences came from previous school shooters, especially Harris and Klebold. His mother said, for example, that his music preferences changed (NBI, 2008, 558). Her statement refers to the industrial music commonly listened to by school shooters (Kiilakoski & Oksanen 2011a). Other late interests included first-person shooting games (*Battlefield 2* and *Hitman*) and certain films prioritized by previous shooters (e.g. *Natural Born Killers*). Auvinen, who was described as a well behaved and shy young man, adopted an aggressive male role online. Auvinen got deep into the mythology of the Columbine shooting and even identified with the sexual fantasies of Eric Harris (Oksanen & Kiilakoski, 2011a, pp. 263–264). Online forums enabled Auvinen to live out possibly pre-existing narcissistic traits.

Although the police found only 46 videos by Auvinen on his computer, he claimed he had made at least 140 (Kiilakoski & Oksanen, 2011a). Auvinen first used the user name NaturalSelector89 on YouTube in March 2007. According to one online friend, he got into an argument with an American named AmazingAtheist, who criticized YouTube users glorifying violence. As a result the NaturalSelector89 account was closed (NBI, 2008, pp. 366–367). A few weeks before the shooting Auvinen returned with his Sturmgeist89 account. Students at Auvinen's school in Jokela already knew about his online activity in spring 2007, and there were rumors that he was planning a bomb explosion (NBI, 2008, p. 449). In fall 2007, two months before the shooting, friends told a teacher of their concerns about his fascination with the Columbine school shooting (NBI, 2008, p. 447).

Auvinen's *Natural Selector's Manifesto* was part of the media package uploaded just before the shooting, but parts of it were ready long before. The manifesto was influenced by Theodore Kaczynski's *Industrial Society and Its Future* (the "Unabomber manifesto," 1995), which Auvinen downloaded from the internet in January 2007 (and his mother borrowed the Finnish translation from the library for him) (NBI, 2008, pp. 15, 555). On May 8, 2007, he created a computer file for his own manifesto (ibid., p. 14), parts of which he used in his videos (Oksanen & Kiilakoski, 2011a). At some point in spring 2007 one teacher heard about the manifesto from students (NBI, 2008, p. 137). Another recalled that in spring 2007 Auvinen had written a school essay aiming to justify why some individuals are allowed to determine the destiny of others. The same teacher added that three weeks before the attack he wrote another essay discussing school shootings and terrorist attacks by individuals. (ibid., p. 170).

Auvinen's final manifesto was influenced not only by the Unabomber's manifesto, but also the writings of the Finnish radical ecophilosopher Pentti Linkola, works by the German philosopher Friedrich Nietzsche, and Plato's *Republic*. Auvinen's reading of the classics of philosophy was unsophisticated and his text uses jargon and aggressive language. He was opposed to "mass humans," which he classified as 94% of the human race. The remaining 6% he called individualistic or manipulative. Auvinen considered himself to be an individual liberator, and "godlike" compared to others. It is notable that both online and offline Auvinen often behaved as if he were superior to other people in general (NBI, 2008). In the manifesto, he writes:

> The majority of people in society are weak-minded and ignorant retardos, masses that act like programmed robots and accept voluntarily slavery. But not me! I am self-aware and realize what is going on in society! I have a free mind! And I choose to be free rather than live like a robot or slave. You can say I have a "god complex", sure... then you have a "group complex"! Compared to you retarded masses, I am actually godlike. (*Natural Selector's Manifesto* by Pekka Eric Auvinen, author's archive)

Auvinen saw his act as political violence. He made comments about political violence both offline and online. In his diary, he remarked upon Timothy McVeigh's Oklahoma City bombing , the Columbine school shooting, and the Myyrmanni bombing (NBI, 2008, p. 9). When worried students asked directly whether he was planning a school shooting, he said he would go on a rampage in the Finnish parliament (NBI, 2008,p. 487). In an online discussion with a 12-year-old female school shooting enthusiast, he said there were many places where he might commit a mass killing, such as a shopping mall, but thought that an attack on a school would create the most publicity (NBI 2008, 402). He expressed similar justifications in a profile that was part of his media package:

> Attack Type: Mass murder, political terrorism (although I chose the school as a target, my motives for the attack are political and much, much deeper and therefore I don't want this to be called only a "school shooting"). (Attack information, from the media package of Pekka-Eric Auvinen, author's archive)

Auvinen idolized various Western terrorists and radical right- and left-wing violence fascinated him. His mother said in the police interview that she believed her son refused to feel empathy for others and that he was more concerned with ideological motives (NBI, 2008, p. 555). Terrorism provided an ideological background for a young man who was disappointed with traditional politics. Videos he made include references to various serial and spree killers. He dedicated tribute videos to the Columbine shooters and to Oliver Stone's *Natural Born Killers* (Kiilakoski & Oksanen, 2011a). The video *Mass of Murders* shows pictures of famous school shooters, mail bombers, mass murderers, and terrorists (see Table 1). Each picture is accompanied by a caption stating who they were and what methods they used.

((insert Table 1 about here))

The data confirms that dozens of people were aware of Auvinen's problems. They heard Auvinen talk about shootings. They saw him drawing pictures of school shootings, terrorist attacks, and the 9/11 terrorist attacks in New York (NBI, 2008, p. 355) Concern mounted when he got permission to own a gun, on which he commented in a forum: "Weird country, to give a gun to a maniac like me" (NBI, 2008, p. 19, translated). A fellow student asked jokingly: "You have bought a gun. You are not going to shoot anyone?" "Probably sub-humans", he replied. The same student added that "sub-human" could mean anyone to Auvinen, because he considered himself superior. Auvinen later told the same student that he was going to go down in history (NBI, 2008, pp. 212–213). Like many shooters before him he sought fame through the shooting (Fast, 2008, p. 19; Larkin, 2009, pp. 193–195; Lee, 2009, pp. 337–353).

Even after Myyrmanni, an attack in a public place like a school was not considered plausible in Finland before Jokela (Oksanen et al., 2010). Perhaps this explains why so many warning signs were ignored. The parents were well aware of their son's radical thoughts and knew he had started to practice shooting (NBI, 2008, p. 555). Students in school knew about the gun and had expressed their concerns about him to teachers. In addition, students had also told the local youth worker that Auvinen had talked about a revolution which would kill them all. The youth worker informed the school principal, who did not consider Auvinen to be a problem (Kiilakoski, 2009, p. 53).

Auvinen entered his school with a gun on the morning of November 7, 2007, after uploading his media package. He wanted to become a rebel revolutionary, and commit an individual and heroic act. In the suicide note for his parents, Auvinen wished that in future individuals would be given better chances (MTV3, 2008). During the shooting, his behavior was described as uncontrolled and haphazard. Some of his victims were random, but some may have been premeditated. It was reported that he had despised single mothers and homosexuals, which may have motivated some of his murders (NBI, 2008, p. 433). Auvinen adopted a violent and misogynistic masculine identity (Kiilakoski & Oksanen, 2011a; Kimmel & Mahler, 2003). He also killed a female nurse who had been worried about him. The principal, with whom Auvinen had had an argument beforehand, became his last victim. After this he entered a school classroom shouting "this is revolution" and ordered 14-year-old children to smash things up. This was the revenge of young man who had failed the expectations of masculinity. Auvinen later committed suicide in the school toilet.

6. A vulnerable community in crisis

The Jokela school shooting raised many questions. Why did Auvinen commit his dreadful acts, and what were his motives. Locally and nationally the shooting was incomprehensible: Auvinen was a native Finn and in many respects a normal citizen who had gone through Finnish schooling. In the local community the shooting was even more troubling, since Auvinen had lived most of his life there. He had also faced problems there during his life, including earlier experiences with school bullying. Such an attack directed against the attacker's own community makes the case psychologically difficult to cope with.

Most interviewees reported that the shooting affected everyone in the community in some way. In addition to people who were directly harmed or disrupted, the shooting was said to have affected the daily lives of nearly every member of the community. Roads near the school and the perpetrator's house were closed, some businesses and municipal services were closed, and people interrupted their daily activities to gather near the school or follow the events on TV or on-line news. Police, crisis counseling groups, and national and international media entered the town and stayed for days. Many were shocked by the events, and the shock was aggravated by the fact that in this small community many personally knew at least one of the victims, the perpetrator, or their families.

In the survey questionnaire, over one third of respondents (34%) said they knew someone who had died in the shooting. The shooting was experienced as a crisis of the whole community. In the interviews, the town was constructed as a collective subject and the entire community considered the victim of the incident. Families with school-age children were in a particularly vulnerable position. Almost half (48%) of parents with school-age children said that they knew someone who died in the shooting. Parents of pre-school and school-age children, especially, reported feelings of panic and shock during the shooting:

> I called my son and he whispered on the phone: "We're here in the classroom." Meaning they were on the floor of the classroom and had to be quiet. I was wondering if someone was pointing a gun at his head or what. Because we didn't know what the situation was and we heard that the shooter hadn't been captured, of course the terror just grew bigger. (Woman, Local people interview 2)

The fear felt by parents was altruistic: they were concerned about the well-being of their children during the shooting, but for many the anxiety persisted after the incident because it devastated the image of Jokela as a quiet community and a safe place to raise children, at least temporarily. The stunned local people repeated that this kind of tragedy was beyond comprehension; something like that could not take place in Jokela (see also Oksanen et al., 2010).

Social interaction, cooperation, and solidarity were reported to have increased after the shooting (see also Nurmi et al., 2012). Social support among friends and family members, increased face-to-face interaction with other members of the community, and informal gatherings were among the concrete forms of solidarity. However, symbolic solidarity in the form of public displays of sorrow was more common. This included lighting candles around the pond next to the school, sending condolences to the victims' families, and attending memorial services. Most respondents thought that the shared grief strengthened the sense of community. A rather strong collective narrative that emphasized unity and emotional solidarity emerged from the accounts of the interviewed residents (Nurmi, 2012). Professional and voluntary crisis workers reported that social interaction and cooperation remained at a high level at least during the following days, and the sense of community even longer.

According to the interviewed professionals, one consequence of the shooting incident was that different groups formed based on age, experience of the shooting, and opinion. The most radical was the division between young people and adults. This can be partly explained by the fact that young people and adults went to different locations for help and counseling after the shooting. Although there were exceptions, parents and other adults mostly visited the crisis center in the church complex, whereas the young people gathered in the local youth facilities. As a result of this division of the community, some of the young people formed extremely tight peer groups, completely excluding adults. Adults might have been able to represent a psychological resource for young people coping with such traumatic incident.

Residents talked about conflict and contradiction concerning attitudes toward the family of the perpetrator. The community divided into those who directly or indirectly blamed the parents for the shooting and those who did not. The situation of the perpetrator's family in the local community was quite problematic after the shooting. The parents of the perpetrator said that while many community members offered their sympathy and condolences, some people, including neighbors, social workers, and members of the school staff, started to suggest that the family should move away from Jokela. The mother of the perpetrator said that the public discussion blaming and stigmatizing their family "was nothing compared with the attempts to freeze us out of Jokela" (Parents' interview 1).

Crisis workers especially mentioned factors that made the collective processing of the incident difficult: collective guilt and shame related to the stigmatization of the community. In everyday language, Jokela became a synonym for school shootings, at least until another school shooting took place in Kauhajoki. Residents said that Jokela's association with school shootings damaged the image of the community. This was relevant, for example, in situations where a resident had to tell someone outside their own community that they came from Jokela. In such situations some residents preferred not to mention their town of residence in order to avoid questions about the shooting.

Crisis workers also mentioned the collective guilt felt by the residents. This related to the question of why the tragedy happened. One interviewed crisis worker said that "when something terrible like this happens, people want to find out whose fault it is. So, [there is] a shared feeling of guilt" (Expert interview, 4). Some interviewed local residents discussed the failure to prevent the shooting, referring especially to the school and inadequate mental health services. However, most were reluctant to discuss this matter, because some of the main actors in the school were killed in the shooting. Interviewed experts, however, reported that the young blamed the adults and school staff for not taking their warnings seriously. Still, many of the young were left with a feeling that they, too, should have done something to prevent the shooting.

7. Coping in the community – social support and solidarity

Earlier studies indicate that social cooperation and solidarity can enhance the possibilities for successful coping with mass tragedies such as school shootings. Social solidarity, for example, has an effect on the psychological well-being of local people after a school shooting (Hawdon & Ryan, 2011; Hawdon et al., 2012). Social support and meaningful relationships may be the key issues for successful recovery, because shocking events tend to increase everyday anxieties and worries about violent crime. School shootings receive obvious prominence in the media. They create public and policy concerns for good reason (Lee & Farrall, 2009, p. 4). As we have seen, school shootings are particularly difficult to cope with. The crisis of a shooting tragedy might foster fears of yet another shooting and thus endanger successful coping.

Following these ideas, we first hypothesize that stronger social support has an independent effect on increased social solidarity and both institutional and generalized trust. Second, we expect that social support is mediated through heightened trust and reduces the intensity of fear of severe targeted violence. Third, social solidarity and institutional trust may facilitate the stronger generalized trust that might help people to cope with stressful events, and furthermore reduce the fear of severe targeted violence. They may have an independent effect on the fear of violence as well. We used quantitative community data collected six and eighteen months after the tragedy to test these hypotheses. Instead of presenting descriptive statistics for community measures, we present a model explaining how different positive and negative experiences were linked to each other. This procedure helps us to understand how social resources may contribute to healthier recovery after tragic incidents.

The following analysis is based on structural equation modeling (SEM) and focuses on the relationships between three latent constructs: social support, social solidarity, and institutional trust. In addition, we seek to predict how these three constructs contribute to the level of generalized trust and the fear of severe targeted violence. The basic principle of SEM is to identify relationships between variables and create a diagram. A two-step modeling method included separate assessment of the measurement model and the structural model (Byrne, 2010). The primary concern was to evaluate the measurement of each latent variable used in the study. All the study variables were measured on a five-point Likert-type scale ranging from 1 to 5 (see Table 2). This technique allowed us to explore the path between the correlated and latent items.

((insert Table 2 about here))

Technically, the model fitted our theoretical assumptions adequately.[1] Contrary to our general hypotheses, our model indicated that social support did not have an effect on generalized trust. Nor did social solidarity and institutional trust have a direct relationship with increased concern about severe violence. The final structural model, path coefficients, and proportions of variance accounted

[1] Standardized factor loadings were at least moderate (>0.50) and all loadings were statistically significant at a 99% confidence level in both data sets. No indications of multicollinearity were discovered. Chi-square statistics, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA) were used to determine the structural model fit. Also, the path coefficients were assessed for statistical significance.

for are presented in Figure 1, which includes information on both waves (second wave data in parentheses).

((insert Figure 1 about here))

It appears that social support has a strong relationship with social solidarity. Where social support is greater, social solidarity is likewise greater both six and eighteen months after the tragedy. Social support alone explained a considerable share (25%) of the variation of social solidarity in the first wave and even more (40%) in the second. Social support also had a weak impact on institutional trust. As noted earlier, social support did not have an impact on generalized trust and fear of severe targeted violence, but is mediated via solidarity and institutional trust. Stronger social solidarity is connected to both increased institutional trust and generalized trust. In our model these two factors are mediated through generalized trust on fear of severe targeted violence. Taken together, social support and social solidarity explain 26% of the variation in institutional trust (36% in the second wave). Social solidarity and institutional trust explain 23% of the variation in generalized trust (38% in the second wave). Figure 1 also shows that generalized trust is connected to concern about severe violence. This is to say that people who do not trust others worry more about severe violence than those who generally trust other people.

Our explanatory analysis demonstrates how social relationships build social solidarity and connectedness to the local community. Although the explained variance of fear of severe targeted violence remained rather modest, the results insights into the social processes of everyday worry that shocking events may produce. These findings are important, since school shooters and terrorists often purposely set out to cause fear. The results show that social support and social solidarity play a role in protecting against fear after violent tragedies. There is no prior research to serve as a point of comparison, and we have to bear in mind that the domain of the study is specific.

According to our results, for people who create stronger social bonds, these resources help to cope with even severe targeted violence in the community. At the same time, however, we need to be cautious when drawing conclusions from a set of correlations measuring the subjective perceptions of social support, solidarity, the fear of violence, and trust. Prior research shows that socio-demographic background is strongly connected with different types of risk experience and fear of violence. According to studies conducted in the United States and Europe, people with lower levels of education and income, women, and younger age groups generally report greater concern regarding mass violence, crime, and other sources of risk (Hawdon & Ryan, 2011; Oksanen et al., 2010; Savage, 2003). It thus follows that the relationships between social support and fear of violence are also likely to vary across population groups.

8. The social and cultural consequences of the Jokela school shooting

School shootings in Finland have caused a political discussion about psychological services for young people. Immediately after the shooting, the community of Jokela received a considerable amount of money for aftercare (Oksanen et al., 2010; Oksanen et al., 2012). There was much less discussion about prevention of future tragedies, and little was done before the Kauhajoki shooting (which took place only ten months after Jokela). For example, amendments to gun laws had not progressed much (Lindström et al., 2011). In Kauhajoki, a depressed young man who had been unable to complete his military service for psychological reasons was legally able to purchase a gun. Before the shooting he was interviewed by the local police for uploading threatening videos on the internet. The officer concerned found no legal cause to arrest him or confiscate his gun. He attacked his school soon afterwards. The police officer was later charged with dereliction of duty, but was found not guilty. (Kiilakoski & Oksanen, 2011b.) Although the availability of guns is only one factor, much of the public attention was directed to the gun laws.

The political motives of school shootings and the Myyrmanni bombing have not been taken into consideration in the Finnish public discussion. The Finnish Security Intelligence Service stressed that these incidents were not terrorism (Malkki, 2011). In fact, they underline there is very little (if any) terrorist activity in Finland—meaning that organized Islamist or other radical groups are not

active in Finland (Kullberg, 2011). Despite this, all three Finnish cases resemble terrorist attacks, and resulted in 27 deaths and almost 200 injuries. There is irrefutable evidence that the Jokela shooting in parrticular was politically motivated. Pekka-Eric Auvinen subscribed to an extremist ideology and was disappointed with the political system in Finland. In general, his writings resemble the texts of Theodore Kaczynski and Anders Behring Breivik, the man behind the attacks in Norway in July 2011.

The shootings have had direct consequences for school safety school: The Jokela shooting changed school safety instructions and more generally the safety scenario for schools (Partanen & Nikula, 2010). Anti-bullying programs such as KiVa were introduced and promoted (Kärnä et al., 2011). Now there was awareness that terrible tragedies such as targeted shootings could happen in schools. The possibility of new shootings has been taken seriously, especially after the Kauhajoki shooting. Five years on, the memory of the Jokela shooting remains alive. After Kauhajoki there have been no new cases. However, in Alahärmä, western Finland, in January 2012 an 18-year-old male student attacked a student who had bulied him with a knife before committing suicide (Harju & Markkanen, 2012). The victim survived. In February 2012, in Imatra, eastern Finland, a 16-year-old-boy attacked a peer with a knife in class (Harju, 2012). Furthermore, a disturbed man attacked the school in Orivesi with the intention of taking revenge on his ex-girlfriend. Luckily, this case caused no casualties, because of the quick reaction of both school and police.

After Jokela various schools have been threatened with similar attacks or other types of severe violence. During the three months following the Jokela shooting, there were 70 threats in 64 schools in 40 municipalities in different parts of Finland. Most of the offenders were boys aged 14–15, but some were girls or older boys. Most of the threats were described as an ill-considered action, a whim (Puustinen, 2008). By October 2011, four years after Jokela 580 threats had been reported according to the Finnish police, of which 57 have gone to court (STT, 2011). There are also dozens of cases that were thought serious enough for the adolescent perpetrator to be sent for psychiatric examination. One study reports 73 such cases in the period 2007–2009 (Lindberg, Sailas, & Kaltiala-Heino, 2010).

Besides the immediate political and social consequences for Finnish society, the Jokela shooting left its mark on online cultures. Auvinen was connected online to individuals and groups in Finland and other countries (Semenov et al., 2010). He had devoted time and energy to building himself an image as a school shooter and left a lot of material behind. Auvinen notably cultivated images of martyrdom and political revolt against oppressors (Kiilakoski & Oksanen, 2011a). Such romanticized images may make them rebels in the eyes of young people troubled by experiences of bullying at school and psychological problems which magnify the seriousness of these experiences.

9. Discussion

The Jokela school shooting was considered an unexpected tragedy in Finland. There are, however, several indications that Jokela was only the tip of the iceberg. Before Jokela there were several homicides in Finnish schools, and already during the 1990s and the early 2000s there had been severe stabbings. Guns were also brought to school after the Columbine tragedy, which became a media spectacle in Finland as in many other Western. Another important background factor is the relatively high rates of adolescent suicide in Finland. Young people in Finland are twice as likely to commit suicide as young Americans.

Our qualitative and quantitative analysis of the Jokela case confirms many of the general characteristics described in earlier studies (Bondü & Scheithauer 2011a; Newman et al., 2004; Vossekuil et al., 2000). Auvinen was bullied and ostracized. Parents and teachers in the small community failed to prevent his social exclusion. It is possible that these negative experiences exacerbated his poorly handled psychological problems. Auvinen was interested in politics from early on and moved gradually to more radical thoughts. He did not hide his extremism. He found support for his ideology in an online communities that glorified school shootings. The last few months before the shooting were crucial. His school peers worried about him and expressed their concerns to teachers, and to a youth worker who informed the school principal.

The Jokela and Kauhajoki school shootings are striking examples of failure of violence prevention. Both shooters expressed their sympathies for school shootings and similar attacks, and had peers who were worried about them. They were able to purchase guns and progress with their plans (Kiilakoski & Oksanen, 2011b). In Jokela, it was not one aspect of prevention that failed. First of all, there was a community which condoned the ostracism. Secondly, the school system failed repeatedly to socially integrate Auvinen. Thirdly, the health care system failed to provide psychological treatment. Fourthly, teachers and the school principal failed to take the warnings seriously.

The shooting had many tragic consequences of for the local community. Many people lost friends and many knew people who died in the incidents. Children in the school were the immediate victims. Half of the female students and one third of the male students were suffering from posttraumatic distress four months after the shooting (Suomalainen, Haravuori, Berg, Kiviruusu, & Marttunen, 2010). Besides the students, families with school-age children were in a vulnerable position. Our interview data shows that the shooter having lived most of his life in the community made the shooting especially difficult to cope with. Many people felt guilt and even shame for living in Jokela. Some of the social conflicts have lasted years and it will probably be a long time before all have dealt with with the trauma caused by the shooting.

Our quantitative analysis shows that social support and solidarity are connected to both institutional trust and trust in people in general. Having trust in other people provides a sense of security that may help people to cope with such tragedies. Social solidarity especially has a positive impact on psychological well-being (Hawdon et al., 2012). It is crucial for people to use their social networks and resources to cope with such traumatic incidents. Different socio-demographic groups have different ways of reacting to such tragedies (Oksanen et al., 2010). Coping is not only a matter of psychological or social well-being. It is important to understand that successful coping with traumatic violence opens the door to the successful prevention of future tragedies.

The Jokela school shooting reveals important sociological factors relating to social integration and moral regulation. Emil Durkheim touches on this issue in his seminal work on suicide, building his model of different suicide types on these factors (Durkheim, 1897/2007). The Jokela shooting reveals both a lack of social integration and a lack of moral regulation. The perpetrator did not fit into the small community of Jokela and even his mother felt she was an outsider. The community failed to socially integrate the shooter. There was also a lack of moral regulation. Auvinen's radical views were not seriously condemned or even criticized by the adults. The perpetrator was able to express his sympathy for totalitarian regimes in school for years. He wrote essays referring to school shootings and terrorist violence. Some of the teachers even admit that they were reluctant to oppose him. It was mostly his offline school friends who reacted against such thoughts.

Although the high number of school threats recorded after the Jokela shooting may be due in part to a zero-tolerance approach by Finnish police, they reveal real problems, especially since many were claimed to be jokes. Not even mass murders are taken seriously. This is perhaps the most disturbing observation. School bullying, ostracism, and psychological problems can be resolved and treated. It is much more difficult to prevent certain cultural models or scripts from becoming attractive to young people. Violent ideas and ideologies are disseminated globally via the internet. School shooters have become icons of rebellion against bullies and oppressors (Kiilakoski & Oksanen, 2011a). Resistance to such glorification of violence would mean putting more emphasis on the tragic and traumatic consequences of violence caused by disturbed individuals who kill innocent people.

References

Addington, L. A. (2009). Cops and cameras: Public school security as a policy response to Columbine. *American Behavioral Scientist, 52*(10), 1426–1446.

Bannenberg, B. (2010). *Amok: Ursachen erkennen – Warnsignale verstehen – Katastrophen verhindern*. Munich: Random House.

Birkland, T. A., & Lawrence, R. G. (2009). Media framing and policy change after Columbine. *American Behavioral Scientist, 52*(10), 1405–1425.

Bondü, R., & Scheithauer, H. (2011a). *Amoklauf und School Shooting: Bedeutung, Hintergründe und Prävention*. Göttingen: Vandenhoeck & Ruprecht.

Bondü, R., & Scheithauer, H. (2011b). Explaining and preventing school shootings: Chances and difficulties of control. In W. Heitmeyer, H-G. Haupt, S. Malthaner, & A. Kirschner (Eds.), *Control of violence: Historical and international perspectives on violence in modern societies* (pp. 295–314). New York: Springer.

Böckler, N., Seeger, T., & Heitmeyer, W. (2010). *Schulamokläufer: eine Analyse medialer Täter-Eigendarstellungen und deren Aneignung durch jugendliche Rezipienten*. Weinheim & Munich: Juventa.

Böckler, N., Seeger, T., & Heitmeyer, W. (2011). School shooting: A double loss of control. In W. Heitmeyer, H-G. Haupt, S. Malthaner, & A. Kirschner (Eds.), *Control of violence: Historical and international perspectives on violence in modern societies* (pp. 261–294). New York: Springer.

Borum, R., Cornell, D., Modzeleski, W., & Jimerson, S. R. (2010). What can be done about school shootings? A review of the evidence. *Educational Researcher, 39*(1), 27–37.

Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. London: Routledge.

Currie, C., Gabhainn, S. N., Godeau, E., Roberts, C., Smith, R., Currie, D., & Barnekow, V. (Eds.) (2008). *Inequalities in young people's health: HBSC international report from the 2005/2006 survey*. Copenhagen: WHO Regional Office for Europe.

Durkheim, Émile. (1897/2007). *Le suicide: étude de sociologie*. Paris: Presses Universitaires de France.

Fast, J. (2008). *Ceremonial violence: A psychological explanation of school shootings*. Woodstock & New York: Overlook.

Gerdt, A. (2004). *Petrin matka Myyrmanniin*. Helsinki: Gummerus.

Harding, D. J., Fox, C., & Mehta, J. D. (2002). Studying rare events through qualitative case studies. *Sociological Methods & Research, 31*(2), 174–217.

Harju, J. (2012, February 15). Koko luokka näki puukotuksen. *Helsingin Sanomat*.

Harju, J., & Markkanen, K. (2012, January 10). Koulupuukottaja kuoli kolarissa. *Helsingin Sanomat*

Hawdon, J., & Ryan, J. (2011). Social relations that generate and sustain solidarity after a mass tragedy. *Social Forces, 89*(4), 1363–1384.

Hawdon, J., Räsänen, P., Oksanen, A., & Ryan, J. (2012). Social solidarity and wellbeing after critical incidents: Three cases of mass shootings. *Journal of Critical Incident Analysis* 3: 1, 2–25.

Hawdon, J., Ryan, J., & Agnich, L. (2010). Crime as a source of solidarity: A research note testing Durkheim's assertion. *Deviant Behavior, 31*(8), 679–703.

Helsingin Sanomat. (2001, April 5). Tukholman kouluampujalle yhdeksän vuoden tuomio. *Helsingin Sanomat*.

Hoffmann, J., Roshdi, K., & Robertz, F. (2009). Zielgerichtete schwere Gewalt und Amok an Schulen: Eine empirische Studie zur Prävention schwerer Gewalttaten. *Kriminalistik, 25*(4), 196–204.

Investigation Commission of the Jokela School Shooting [ICJ]. (2009). *Jokela School Shooting on 7 November 2007: Report of the Investigation Commission* (Publication 1:2009). Helsinki: Ministry of Justice.

Kääriäinen, J. (2008). Väkivalta rikoksena. In N. Ellonen, J. Kääriäinen, V. Salmi, and H. Sariola (Eds.), *Lasten ja nuorten väkivaltakokemukset* (pp. 41–51). Tampere and Helsinki: Police College of Finland and National Research Institute of Legal Policy.

Kääriäinen, J., & Lehtonen, H. (2006). The variety of social capital in welfare state regimes – A comparative study of 21 countries. *European Societies, 8*(1), 27–57.

Kaczynski, T. (1995, September 22). Industrial society and its future. *Washington Post*. Retrieved from http://www.washingtonpost.com/wp-srv/national/longterm/unabomber/manifesto.text.htm

Kaltiala-Heino, R., Rimpela, M., Marttunen, M., Rimpelä, A., & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: School survey. *British Medical Journal*, *319*, 348–351.

Kärnä, A., Voeten, M., Little, T. D., Poskiparta, E., Kaljonen, A., & Salmivalli, C. (2011). A large-scale evaluation of the KiVa antibullying program: Grades 4–6. *Child Development, 82*(1), 311–330.

Kiilakoski, T. (2009). *Viiltoja: Analyysi kouluväkivallasta Jokelassa*. Helsinki: Finnish Youth Research Network. Retrieved from http://www.nuorisotutkimusseura.fi/julkaisuja/viiltoja.pdf

Kiilakoski, T., & Oksanen, A. (2011a). Soundtrack of the school shootings: Cultural script, music and male rage. *Young, 19*(3), 247–269.

Kiilakoski, T., & Oksanen, A. (2011b). Cultural and peer influences on homicidal violence: A Finnish Perspective. *New Directions for Youth Development, 33*(129), 31–42.

Kimmel, M. S., & Mahler, M. (2003). Adolescent masculinity, homophobia, and violence. Random school shootings, 1982–2001. *American Behavioral Scientist, 46*(10), 1439–1458.

Kullberg, A. (2011). Terrorismi ja Suomi. In A. Kullberg (Ed.), *Suomi, terrorismi, Supo* (pp. 10–44). Helsinki: WSOY.

Lahti, A., Räsänen, P., Riala, K., Keränen, S., & Kakko, H. (2011). Youth suicide trends in Finland, 1969–2008. *Journal of Child Psychology and Psychiatry, 52*(9), 984–991.

Larkin, R. (2009). The Columbine legacy: Rampage shootings as political acts. *American Behavioral Scientist, 52*(9), 1309–1326.

Lawrence, R. A., & Birkland, T. A. (2004). Guns, Hollywood and criminal justice: Defining the school shootings problem across public arenas. *Social Science Quarterly, 85*(5), 1193–1207.

Lee, J. (2009). *Celebrity, pedophilia, and ideology in American culture*. Amherst, NY: Cambria Press.

Lee, M., & Farrall, S. (2009). *Fear of crime: Critical voices in an age of anxiety*. Abingdon:

Routledge-Cavendish.

Lindberg, N., Sailas, E., & Kaltiala-Heino, R. (2010). The copycat phenomenon after two Finnish school shootings: An adolescent psychiatric perspective. A poster at the 2nd International Congress of the European Association for Forensic Child and Adolescent Psychiatry, Psychology and other involved Professions, Basel, September 7–10, 2010. Retrieved from http://registration.akm.ch/einsicht.php?XNABSTRACT_ID=113856&XNSPRACHE_ID=2&XNKONGRESS_ID=120&XNMASKEN_ID=900

Lindström, K., Räsänen, P., Oksanen, A., & Nurmi, J. (2011). Politiikkaprosessi ja aselainsäädännön uudistaminen Jokelan ja Kauhajoen koulusurmien jälkeen. In J. Saari & M. Niemelä (Eds.), *Politiikan polut ja hyvinvointiyhteiskunnan muutos* (pp. 254–271). Helsinki: Kela.

Malkki, L. (2011). Suomessa ei ole terrorismia, koska ”Suomessa ei ole terrorismia”? 2000-luvun väkivallanteot ja tulkintojen merkitys. In A. Kullberg (Ed.), *Suomi, terrorismi, Supo* (pp. 204–224). Helsinki: WSOY.

MTV3. (2008). *45 Minuuttia*, November 5, 2008. Interview with the parents of Pekka-Eric Auvinen. Retrieved from http://www.katsomo.fi/?progId=3650&itemId=1052

Muschert, G., & Peguero, A. A. (2010). Columbine effect and school anti-violence policy. *Research in Social Problems and Public Policy, 17*, 117–148.

National Bureau of Investigation [NBI]. (2008). *Esitutkintapöytäkirja 2400/R/488/07*. Vantaa: Finnish Police.

National School Health Survey. (2009). *Koulukiusaaminen.* Retrieved from http://info.stakes.fi/kouluterveyskysely/FI/tulokset/taulukot2009/kiusaaminen2009.htm

Newman, K. S., Fox, C., Harding, D. J., Mehta, J., & Roth, W. (2004). *Rampage: The social roots of school shootings*. New York: Basic.

Nurmi, J. (2012). Making sense of school shootings: Comparing local narratives of solidarity and conflict in Finland. *Traumatology*, doi: 10.1177/1534765611426787.

Nurmi, J., Räsänen, P., & Oksanen, A. (2012). The norm of solidarity: Experiencing negative aspects of community life after a school shooting tragedy. *Journal of Social Work, 12*(3), 300–319.

Oksanen, A., Räsänen, P., Nurmi, J., & Lindström, K. (2010). “This can’t happen here!” Community reactions to school shootings in Finland. *Research on Finnish Society, 3*, 19–27.

Oksanen, A., Räsänen, P., & Nurmi, J. (2012). Jokela and Kauhajoki: Experiencing school shootings in a Nordic welfare society. In R. Schwester (ed.), *Handbook of critical incident analysis* (pp. 252–264). New York: M. E. Sharpe.

Partanen, P., & Nikula, A. (2010). *Oppilaitosten turvallisuus: Työryhmän raportti* (publication 40/2009). Helsinki: Ministry of the Interior.

Pihlaja, J. (2003, August 26). Lukiolaispoika linnoittautui koulun katolle Haminassa. *Helsingin Sanomat*.

Puustinen, M. (2008). 70 uhkausta kouluihin. *Opettaja, 103*(7), 8–12.

Rauma Police Department. (1989). *Esitutkintapöytäkirja 3603/RP/R/146/89*. Rauma: Finnish Police.

Robertz, F., & Wickenhäuser, R. (2010). *Der Riss in der Tafel: Amoklauf und schwere Gewalt in der Schule* (2d ed.). Berlin & Heidelberg: Springer.

Ryan, J., & Hawdon, J. (2008). From individual to community: The "framing" of 4–16 and the display of social solidarity. *Traumatology, 14*(1), 43–51.

Saavalainen, H. (2003, August 26). Aseistuminen harvinaista Suomen kouluissa. *Helsingin Sanomat*.

Sahlberg, P. (2010). Educational change in Finland. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *Second international handbook of educational change, part 1* (pp. 323–348). New York: Springer.

Savage, I. (1993). Demographic influences on risk perceptions. *Risk Analysis, 13*(4), 413–420.

Semenov, A., Veijalainen, J., & Kyppö, J. (2010). Analyzing the presence of school-shooting related communities at social media sites. *International Journal of Multimedia Intelligence and Security, 1*(3), 232–268.

Sourander, A., Jensen, P., Rönning, J. A., Niemelä, S., Helenius, H., Sillanmäki, L., & Almqvist, F. (2007). What is the early adulthood outcome of boys who bully or are bullied in childhood? The Finnish "From a Boy to a Man" study. *Pediatrics, 120*, 397–404.

STT. (2011, October 19). Koulu-uhkausten määrä laskussa. *Helsingin Sanomat* . Retrieved from http://www.hs.fi/kotimaa/Koulu-uhkausten+m%C3%A4%C3%A4r%C3%A4+laskussa/a1305547480463

Suomalainen, L., Haravuori, H., Berg, N., Kiviruusu, O., & Marttunen, M. (2010). A controlled follow-up study of adolescents exposed to a school shooting – Psychological consequences after four months. *European Psychiatry, 26*(8), 490–497.

THL. (2010). Peruskoulun yläluokkalaisten ja lukiolaisten hyvinvointi 2000/2001–2008/2009: Kouluterveyskysely 2009. Retrieved from http://info.stakes.fi/NR/rdonlyres/DC2944EE-0D93-49AB-BA6E-EB07CECB21AF/0/kokomaa_yhdistetty_2009.pdf

Twenge, J. M., & Campbell, W. K. (2003). Isn't it fun to get the respect that we're going to deserve? Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin, 20*(2), 261–272.

Uusitalo, T. (2007). *Nuorten itsemurhat Suomessa*. Helsinki: Office of the Ombudsman for Children in Finland, Ministry of Social Affairs and Health.

Verlinden, S., Hersen, M., & Thomas, J. (2000). Risk factors in school shootings. *Clinical Psychology Review, 20*(1), 3–56.

Vossekuil, B., Reddy, M., & Fein, R. (2000). *Safe school initiative: An interim report on the prevention of targeted violence in schools*. Washington, D.C.: U.S. Secret Service National Threat Assessment Center.

Välimaa, R., Kannas, L., Lahtinen, E., Peltonen, H., Tynjälä, J., & Villberg, J. (2008). Finland: Innovative health education curriculum and other investments for promoting mental health and social cohesion among children and young people. In: *Social cohesion for mental well-being among adolescents*. Copenhagen: WHO Regional Office for Europe.

WHO. (2006). Country reports and charts on suicides. Retrieved October 12, 2011, from http://www.who.int/mental_health/prevention/suicide/country_reports/en/index.html

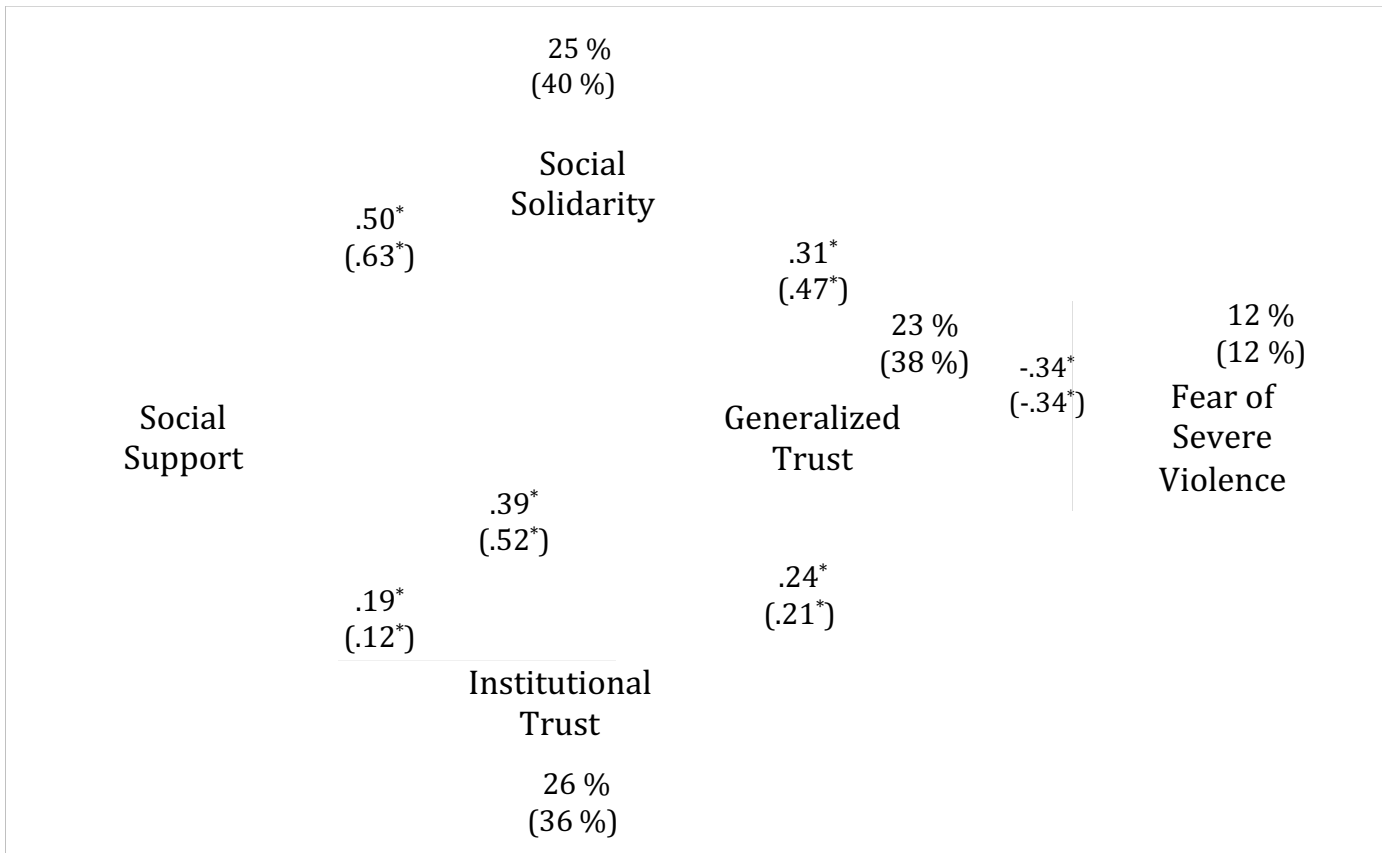
Table 1: People mentioned in the *Mass of murders* video by Pekka-Eric Auvinen (in order of appearance)

Theodore Kaczynski (Unabomber)	American mail bomber active in 1978–1995, killed 3 and injured 23
Eric Robert Rudolf	American anti-abortion and anti-gay activist responsible for multiple bombings in 1996–1998, killed 3 and wounded over 150 people.
Franz Fuchs	Austrian xenophobic terrorist active in 1993–1997, killed 4 and injured 15.
Jeff Weise	American school shooter who killed 9 and wounded 5 at the Red Lake Senior High School in Minnesota in 2005.
Eric Harris & Dylan Klebold	The Columbine school shooters, killed 13 and injured 24 in Colorado in 1999.
Robert Steinhäuser	German school shooter who entered his school in Erfurt, killed 16 and wounded 1 in 2002.
Charles Whitman	Former Marine who killed 16 and wounded 32 at the University of Austin in Texas in 1966
James Oliver Huberty	American security guard who killed 21 and wounded 19 in a McDonald's Restaurant in San Diego in 1984
Seung-Hui Cho	A student of Virginia Tech who killed 32 and wounded 25 at the university in April 2007.
Martin Bryant	Australian spree killer, killed 35 and wounded 21 in a rampage shooting in Port Arthur in Australia in 1996.
Jack Graham	American mass murderer whose bomb caused the crash of an airplane in 1955. 44 people died.
Andrew Kehoe	American suicide bomber and mass murderer whose bombs killed 45 people and wounded 58 in a single day in 1927 in Michigan.
Woo Bum-kon	South Korean police officer who killed 56 and wounded 35 in a spree shooting in Uiryeong Count in South Korea in 1982.
Timothy McVeigh	American Gulf War Veteran and Guard who exploded a bomb killing 168 and wounding over 800 people in Oklahoma City in 1994.

Table 2: Variables used in structural equation modeling (SEM)

Concepts	Questions and assessment scale
Social support	1= does not represent me at all – 5=represents me extremely well – People have time to listen how I am doing – I can openly express my concerns and feelings about the tragedy – I can get help when needed
Social solidarity	1=do not agree at all – 5=I agree completely – I trust my neighbors – People in my community share the same values – My neighborhood is a good place to live in – People cooperate in my neighborhood
Institutional trust	1=cannot be trusted at all – 5=can be trusted completely – Teachers and teaching staff – Social authorities – Municipal officials
General trust	1=cannot be trusted at all – 5=can be trusted completely – People in general
Fear of severe targeted violence	1=I do not worry at all – 5=I am extremely worried – How worried are you that such incidents as Jokela school shootings or Myyrmanni bomb detonation will happen again 1=not at all – 5=very much – To what extent do you think that terrorism is a significant risk factor in Finnish society

Figure 1: Path diagram of the SEM model. Standardized estimates, 2008 values and 2009 values in parentheses



Standardised Coefficients
Chi-Square = 107.94; 60df; p < .001 - (Chi-Square = 103.16; 60df; p < .001)
CFI = .956 (.967)
RMSEA = .052; 90% C.I = .036 − .068 - (.051; 90% C.I = .034 - .067)
* p<.05